# The leaf-piercing eggs of Asceles.

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#### Key words

Phasmida, Asceles, A. margaritatus, leaf piercing eggs.

I recently received from Dr. Francis Seow Choen a small batch of curious leaf-piercing eggs collected from Sepilok Forest Reserve, Sabah. They are Asceles margaritatus Redtenbacher, a species of Necrosciinae, showing yet another quite distinct type of egg from this hotch-potch of a subfamily. Eggs of the winged type of Asceles margaritatus were shown at the January 1990 PSG meeting (PSG Newsletter, 42: 2) and again at the July 1993 meeting, but as far as I know no illustrations have previously been published. These closely match some eggs earlier received from Paul Brock from Tanah Rata, Cameron Highlands, West Malaysia, which must therefore also be Asceles or a very closely related genus. Three Asceles-type eggs are illustrated here.

## Asceles margaritatus Redtenbacher [winged variety] (Fig. 1)

The main egg is 3.5mm long, 2.5mm high and 2.4mm wide, with a piercing spine another 1.9mm long. It is a translucent pale buff with delicate mottling in light brown, particularly around the micropylar plate. The operculum is set at a strong positive angle of around 30° and is unusual in having a capitulum-like structure in the line of the main axis of the egg, thus almost at the ventral edge of the operculum. The micropylar plate (0.9mm x 1.1mm) is almost circular, with a distinct 0.6mm median line. The spine has a rim 0.6mm from the tip where it rests on the pierced leaf; beyond this, where it emerges from the leaf, it is almost completely black. The internal micropylar plate has a conspicuous wide notch below the micropylar stalk and an isolated median line. The eggs appear to have been laid on the upper surface of the leaf, the species of which is as yet unknown.

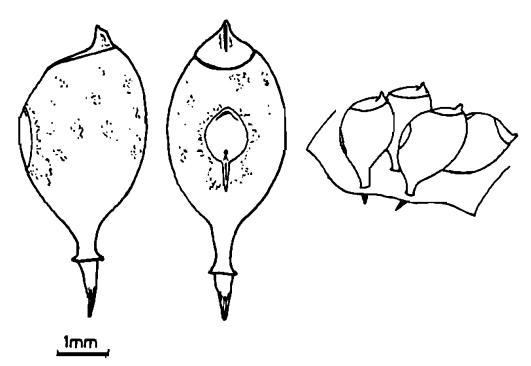


Figure 1. Lateral & dorsal views of A. margaritatus, and a group in situ on a leaf (to a smaller scale)

#### Asceles sp. (Fig. 2)

This description is based on Phil Bragg's material laid by two females (PEB-1639 and PEB-1647) which were collected at Niah National Park, Sarawak, in August 1992. The main egg is 2.5mm long, 1.5mm high and 1.3-1.4mm wide, with a 0.6mm spine. It is a pale translucent colour, with a clearly marked pale brown area between the micropylar plate and the operculum; this area varies in width but always encloses the front of the plate. The operculum is again at an angle of around 30°, with a short blunt protrusion. micropylar plate and median line are distinctly raised, the plate (0.3 mm x 0.5 mm to 0.25 mm x 0.6 mm) is brown and significantly narrower in some eggs than others; the median line is white. The spine is white and blackish at the tip. The internal micropylar plate is similar to that of the previous species. Phil says that these eggs were pale green when freshly laid. He also

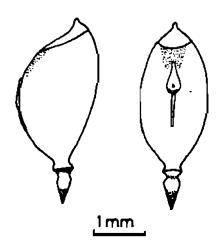


Figure 2. Lateral & dorsal views of Asceles sp.

collected another similar species of Asceles (PEB-1628) from Niah which laid eggs (which I have not examined) of a similar size and shape but were a mottled brown colour.

## Asceles- like species (Fig. 3)

Paul Brock intends to describe this as a new species, the material is from Tanah Rata. The main egg is 2.5mm long, 1.9mm high and 1.7mm wide, with a 1.0mm spine. It is a translucent pale brown with white mottling, forming a compact area of white around the micropylar plate and speckles on the rest of the surface. The operculum is also set at a positive angle of 30° but this time it has a whitish "hood" and a brown pit dorsally. Below the lower rim the spine is brown. The internal micropylar plate is similar to the previous species but without the very conspicuous notch.

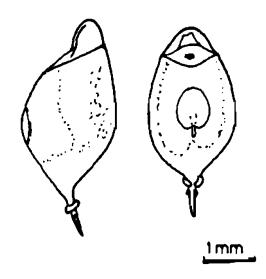


Figure 3. Lateral & dorsal views of Asceles-like species.